Reference Copy
18958 AE ALB

ALBERTA EDUCATION
AND
DIPLOMA REQUIREMENTS

A DISCUSSION PAPER
PREPARED FOR THE
CURRICULUM POLICIES BOARD

Revised Fall 1977

AE ALB

Alberta
EDUCATION

THE ALBERTA TEACHERS' ASSOCIATION
EDMONTON, ALBERTA
T5N 2R1
A·T·A LIBRARY

FOREWORD

Recent years have seen an increasing public interest in the programs of study being offered in schools. In that context, much time has been spent in developing goals for basic education. These goals are to be debated in the legislature, and the Minister of Education has received recommendations with respect to them from the Curriculum Policies Board. Additional submissions from interested groups or individuals were encouraged.

To assist in a systematic debate on these matters the Curriculum Branch developed this discussion paper. The paper takes a position with respect to goals and then reviews current programming in light of those goals. It also suggests an alternate program plan. The discussion paper concludes with some implications of the proposed changes.

In recognizing the quality of work done by Dr. J. Harder as the chief author of the paper, the positions taken are not necessarily those of the Curriculum Branch. Neither are they the views of Alberta Education or the government. The process used in the paper received high commendation by the Curriculum Policies Board which, after an initial discussion, requested that the paper be shared with other groups for reaction.

In response to that request the Curriculum Branch is pleased to provide a broad distribution of the paper and to engage interested groups in regional dialogue on the positions put forward. In so doing a number of questions are of prime interest:

THE ALBERTA TEACHERS' ASSOCIATION
11010 - 142 STREET
EDMONTON, - ALBERTA
T5N 2R1

1) Are the proposed objectives clear and inclusive?
2) Are the program proposals arising from those objectives appropriate?
3) Have the significant categories of implications been identified and necessary elements within each category adequately expressed?
4) What are the advantages and disadvantages of the systematic process used within this paper?

Readers will undoubtedly have other questions or comments to contribute. We welcome these in direct dialogue, by correspondence and briefs, or other appropriate means. Upon completion of the regional dialogue, the issues and reactions arising from this paper will be reviewed and recommended upon by the Curriculum Policies Board. As chairman of that board, I wish to thank Dr. Harder for producing such a fine focus for discussion and those of you who will take time to respond in one form or another.

E A Torgunrud

E. A. Torgunrud
Director of Curriculum
Alberta Education

TABLE OF CONTENTS

Page

Preface i

1. INTRODUCTION 1

2. EDUCATION FOR A PURPOSE 2

3. THE NEEDS OF ALBERTA EDUCATION 3
   3.1 Individual Needs 3
   3.2 Societal Needs 4

4. THE GOALS AND OBJECTIVES OF EDUCATION 5
   4.1 Goals of Education 7
   4.2 Objectives of Education 8

5. BASIC LIFE SKILLS 10
   5.1 A Basic Life Skill Program 11

6. THE ELECTIVE PROGRAM 15
   6.1 The Need For Choice 15
      6.11 Definitions 15
      6.12 Application of the Life Skills Matrix to Student Programs 17
   6.2 Current Status of Elective Programs 25
   6.3 Proposed Compulsory Elective and Option Courses 25

7. MAINTAINING STANDARDS 29
   7.1 Competency Measures 30
   7.2 Documentation of Experience 30

8. GRADUATION REQUIREMENTS 31

9. RECOMMENDATIONS 34

10. IMPLICATIONS 35

TABLE OF CHARTS

Page

Chart 1 BASIC LIFE SKILLS COURSE REQUIREMENTS 14

Chart 2 RELATIONSHIP OF CORE, COMPULSORY ELECTIVE AND OPTION COURSES IN PERCENTS 18

Chart 3 JUNIOR HIGH ACADEMIC LIFE SKILLS PROGRAM 20

Chart 4 GRADE TEN LIFE SKILLS 21

Chart 5 GRADE ELEVEN LIFE SKILLS 22

Chart 6 GRADE TWELVE LIFE SKILLS 23

Chart 7 COMBINED HIGH SCHOOL LIFE SKILLS PROGRAM 24

Chart 8 JUNIOR HIGH ELECTIVES 28

APPENDIX A

Chart 9 HIGH SCHOOL OPTIONS ACADEMIC 44

Chart 10 HIGH SCHOOL OPTIONS FINE ARTS 46

Chart 11 HIGH SCHOOL OPTIONS HOME ECONOMICS 46

Chart 12 HIGH SCHOOL OPTIONS BUSINESS EDUCATION 47

Chart 13 HIGH SCHOOL OPTIONS INDUSTRIAL EDUCATION 48

Chart 14 HIGH SCHOOL OPTIONS OTHER 55

PREFACE

This is the second draft of the paper on Alberta Education and Diploma Requirements. The first draft was generally well received by the ten groups to whom it was presented. Some revisions have been made in response to suggestions, particularly in the wording of the goals and objectives; however, the philosophical rationale of the original paper has been maintained.

The paper is a response to requests for changes in our education programs from many segments of our society. In the main, these requests stem from the general dissatisfaction of the public with what they feel are short falls in the education system and the high costs of what they term mediocrity.

There is a movement across this continent and in parts of Europe encouraging an increased specificity of knowledge and more concentration on skill development in both academic and career areas. There is concern for the development of more positive attitudes to work and civic responsibilities. There is a concern to establish standards that are realistic and can be reached by teaching through a systematic approach.

A resolution of all these aspirations cannot be attained quickly. It will take careful planning over a long period of time. It will require consistency on the part of the leaders and continuing support from the constituency.

The position taken in this paper is that many of the developments in Alberta Education are good and should be maintained or strengthened.

It suggests:

(1) that curriculum writers be more specific in spelling out content and that such content be carefully sequenced through the years of schooling,

(2) that certain areas of a student's education for future well-being be made mandatory with adequate time provided,

(3) that the amount of time for free choice options be reduced,

(4) that the objectives of education be confined to what the school can do.

ALBERTA EDUCATION AND DIPLOMA REQUIREMENTS

1. INTRODUCTION

In the past five years several major changes have occurred in Alberta Education. These changes, among which were the move from departmental superintendents to local appointment and the removal of departmental examinations (first at the grade nine and later at the grade twelve level), have left the general public with the feeling that standards have been lowered and that student competencies are deteriorating. In a time of high inflation and the cost-price squeeze, the feeling of helplessness becomes more pronounced and people turn on the field of education, the savior, as having let them down. This then is an opportune time to review the current status of the high school diploma, how it is earned and what it stands for. Such a review calls for a re-examination of schooling and its function.

It is the purpose of this paper to:

(1) give a definition of schooling and to suggest objectives that schools can meet in achieving survival level competencies,

(2) identify core levels of learning along with a selective approach to electives,

(3) suggest ways of maintaining standards for quality education and organizational structures that validate a high school graduation diploma.

2. EDUCATION FOR A PURPOSE

A normal society attempts, through its institutions and conventions, to perpetuate itself. To do this it needs individuals who have respect for and cooperate in the maintenance and enhancement of its values and aspirations.

It is through education that society attempts to achieve these purposes. Its primary vehicle for educating its members is the school. The school provides the formal and perhaps major aspect of education, but other institutions have an impact on the character of the emerging "person" as well. The influence of these institutions, namely, the family, church, community and communication media may or may not reinforce the work of the school, or vice versa.

Over the centuries societies have developed descriptions of the desirable citizen. These have varied somewhat from nation to nation and according to political philosophies. However, one description of the educated man has stood for more than 23 centuries. The characteristics that Isocrates identifies are still valid.

> *"Whom, then, do I call educated _ _ _ _? First, those who manage well the circumstances which they encounter day by day, and who possess a judgment which is accurate in meeting occasions as they arise and rarely miss the expedient course of action; next, those who are decent and honorable in their intercourse with all with whom they associate, tolerating easily and good-naturedly what is unpleasant or offensive in others and being themselves as agreeable and reasonable to their associates as it is possible to be; furthermore, those who hold their pleasures always under control and are not unduly overcome by their misfortunes, bearing up under them bravely and in a manner worthy of our common nature; fourthly, and most important of all, those who are not spoiled by successes and do not desert their true selves and become arrogant, but hold their ground steadfastly as intelligent men, not rejoicing in the good things which have come to them through chance rather than in those which through their own nature and intelligence are theirs from their birth. Those who have a character which is in accord, not with one of these things, but with all of them--these I contend are wise and complete men, possessed of all the virtues."*

"Panathenaicus" (436 - 338 B.C.)

This statement captures the description of the ideal type of person our society would like to see emerge from our schools. To achieve it there are many intermediate objectives that need attention. To begin this task, an identification of needs, both individual and societal, has to be made. Fortunately, we have sound evidence as to what these needs are.

3. THE NEEDS OF ALBERTA EDUCATION

Education is based on two sets of needs. First are the needs of the individual, and secondly, the needs of the society.

Individual needs are drives which arise from within the person and impel the individual toward goals. Societal needs arise from outside the person and have their origin in custom, tradition and successful past experience. The latter gives society its cohesiveness and purpose, being present and future-oriented but prescribing acceptable behaviors and actions.

3.1 Individual Needs

Individuals, although characterized by a broad range of differences, have common needs. Maslow's theoretical model proposes a hierarchy of individual needs, the most basic of which must be satisfied at least to a minimal degree before the higher ones can be met. Beginning with the most basic and continuing through successively higher level needs, the hierarchy is as follows:

(1) Requirements for food, shelter, clothing, rest, health and recreation.

(2) A feeling of safety, security, and trust in relationships with important others, such as family, friends and teacher(s).

(3) A feeling that one is cared about by others, that they are sensitive to one as a person and respond to one's ideas and feelings; a feeling of belonging and acceptance by others, such as group, family, school class, team and peers.

(4) A feeling of positive achievement, success and pleasure; a feeling that others recognize one as an individual in one's own right with unique interests, feelings, ideas and skills.

(5) Becoming more self-directing and less dependent; assuming more responsibility for one's own actions; feeling more adequate, confident, self-sufficient and good about oneself; wanting to learn on one's own, to create and express one's ideas and feelings; becoming more able to take hard knocks and disappointments.

These physical, intellectual, social and emotional needs are the motivating forces within the individual. In addition, there appear to be critical periods and relationships in the developmental sequence of individuals, many of which occur in early life. Therefore, careful attention must be given to meeting individual needs if school programs are to be effective and relevant, for it is believed that children who see themselves as worthy, wanted and desirable normally will learn more readily.

3.2 Societal Needs

This feeling of being worthy, wanted and desirable can be realized only in relation to the society in which one lives. Since the individual and society are constantly interacting with each other, each is being shaped by the other. The dynamics of this interaction demand that the objectives of education consider both the needs of the individual and the needs of society. Society rightfully expects the school, in cooperation with other agencies, to make its contribution to the fulfillment of certain basic needs. Among them we find the following:

1. Nurturing a safe and productive environment.
2. Preparing members to assume useful roles and perform necessary services.
3. Developing modes of effective communication among its members.
4. Developing a set of common ideas, meanings, and procedures.
5. Limiting through law and convention the range of behavior of its members.
6. Establishing procedures to ensure its continuity, maintenance and improvement.

Finally, recognition is given to the fact that those who spend a significant portion of their day in the school society are members of the larger society as well. For the school this means recognizing the pupil as a member of society who is not only being prepared for life outside of and after school but who is also living life while at school. For the pupil it means responding to the opportunity to accept increasing responsibility to the school and to the larger society of which he is a member.

4. THE GOALS AND OBJECTIVES OF EDUCATION

The earlier reference to the educated person as described by Isocrates is congruent with our modern day aspirations. We have an advantage over the Greeks in that we have a formalized public system to prepare persons with life and career coping skills, communication skills, skills of self-expression; a system that fosters the development of emotional stability and feelings of self worth as well as responsible attitudes to work and to the community.

While the school makes a very important contribution to education, it is only one of the agencies involved in the education of youth. The home, the church, the media, and community organizations are very significant influences on children. It is useful, therefore, to delimit the role of schooling in education. Education refers to all the learning experiences the individual has as he interacts with his physical and social environment; it is a continuing and lifelong process. Schooling, which has more limited purpose, refers to the learning activities planned and conducted by a formally structured agency which influences individuals during a specified period. There is, of course, a very close relationship between schooling and education--the learning which occurs in school influences and is influenced by what is learned outside the school.

Goals of education can be classified at different levels ranging from the general order of societal goals to specific competency objectives related to course content. Within this range the Goals of Education are placed at the top of the hierarchy and defined as those learning activities the responsibilities for which are shared by the various agencies and institutions in the community such as the home, school, church, continuing education agencies, the media, recreational organizations and others.

4.1 Goals of Education

Society's responsibility for education through its various agencies is to:

(1) Develop intellectual curiosity and a desire for lifelong learning.

(2) Develop the ability to get along with people of varying backgrounds, beliefs and lifestyles.

(3) Develop a sense of community responsibility which embraces respect for law and authority, public and private property, and the rights of others.

(4) Develop self-discipline, self-understanding, a positive self-concept through realistic appraisal of one's capabilities and limitations.

(5) Develop the ability to understand and respond to change as it occurs in personal life and society.

(6) Develop skills for effective utilization of financial resources, community agencies, and leisure time.

(7) Develop an understanding of the role of the family in society and promote satisfying family relationships.

(8) Develop an interest in participating in the cultural pursuits of creative expression and appreciation.

(9) Develop a commitment to the careful use of natural resources and to the preservation and improvement of the physical environment.

(10) Develop a sense of purpose in life which is consistent with one's ethical and/or spiritual beliefs.

The ultimate aim of education is to develop the abilities of the individual in order that he might fulfill his personal aspirations while making a positive contribution to society.

4.2 Objectives of Education

The next order of objectives relates to what the school should do as its specific contribution to achieving the broader goals identified earlier.

Schooling, as a part of education, accepts primary and distinctive responsibility for specific objectives basic to the broader goals of education. Programs and activities shall be planned, taught, and evaluated on the basis of these objectives in order that students:

(1) Develop competencies in reading, writing, speaking, listening and viewing.

(2) Develop basic knowledge and skills in mathematics, the sciences, and the practical and fine arts.

(3) Develop the learning skills of finding, organizing, analyzing, and applying information in a critical and objective manner.

(4) Develop knowledge, skills, attitudes and habits which contribute to physical, mental, and spiritual health and safety.

(5) Develop basic knowledge and skills in social studies and an understanding of the meaning, responsibilities, and benefits of active citizenship at the local, national and international levels.

(6) Develop the knowledge, skills, attitudes, and habits required to respond to the opportunities and expectations of the world of work.

Because the above objectives are highly interrelated, each complementing and reinforcing the others, priority ranking is not being suggested.

It is recognized that in sequencing learning activities for students some objectives are emphasized earlier than others; however, in relation to the total years of schooling, they are of equal importance.

In working toward the attainment of its objectives, the school will strive for excellence. However, the degree of individual achievement also depends on student ability and motivation as well as support from the home. Completion of diploma requirements is expected to provide the graduate with basic preparation for life long learning. Dependent on program choices, the diploma also enables job entry or further formal study.

Translated into practice this means that each course in the Program of Studies would contribute in a direct way to the achievement of the overall objectives. Each course would be designed to include core content that every student should master in order to proceed to the next level. Content would need to be graduated and sequenced in a logical progression from grade one through grade twelve. The standards of mastery would be set by curriculum committees at the provincial level.

Students not capable of achieving the set standards would be given additional time or routed to alternate programs where the objectives would be less rigorous.

There is a growing recognition that what the school is able to accomplish with youth is highly dependent on the degree of support it receives from other educating influences in society. The role of the family, the most basic unit of society, is critical in this regard. Parents open doors to learning, not only by the home environment they create for children, but also by determining the role to be played by other educating influences such as the church, the media, and community groups. With the support of the home in matters of motivation and discipline of children, the school has a better chance of attaining its goals and making a significant contribution to the broader goals of education.

5. BASIC LIFE SKILLS

The term "Basic Life Skills" as used in this paper refers to those elements of knowledge, skill and attitudes in the social, physical and emotional realms a person in western society needs to cope with the environment in order to maximize his chances for a full and rewarding life.

The basic assumptions upon which the program advocated is designed are:

(1) Objectives must be stated in such a way that they are understood and can be achieved in a school environment.

(2) Much of the content must be specific and mandatory for the measurable achievement of the objectives.

(3) Students must demonstrate mastery of content to a prerequisite level before moving ahead.

(4) Monitoring must be carried on to assure that mandatory content is taught.

(5) A "systems approach" can be used in education.

By the "systems approach" is meant that while all the courses, modules or elements will be interdependent, together they form a unified whole. In the systems approach the interaction or interrelationship of individual courses or elements are analyzed for their contribution to the *major objective. Then the courses or elements are taught in such a way and at such a time as to maximize the performance of the system as a whole.*

The Basic Life Skills program lays out a definite series of courses for every grade. Each course has been selected on the assumption that it will include the learning materials designed to meet a major objective. While current course titles are used in the matrix, these may be changed in time, or revisions of content may be required to conform to the stated objectives. The position taken in this paper is that most of the content for a sound educational program is currently in place but that some reorganization is required along with mandated standards for levels of achievement.

Educators in cooperation with members of the larger community need to sort out and identify those skills and areas of knowledge that every student graduating from high school should have in order to survive in modern society.

The procedure in this paper is to take each educational objective and identify the courses that teach the competencies which must be learned by everyone sometime during the years of schooling in order to produce the "unified whole". It is outcome skills that are the concern here--not detailed curriculum guides identifying content scope and sequence.

5.1 A Basic Life Skill Program

The Basic Life Skill program is designed to achieve the school's objectives and help produce the ideal person. It is recognized that the school is limited in its influence and that all kinds of uncontrolled factors can and will intervene. However, the school can and must help prepare students for responsible citizenship.

The charts that follow start with the objective statement in the first column. This is followed by the courses that serve to achieve the objective and the time spent. Additional columns give the recommended allocation of time as part of the new proposal.

The overall philosophy is that every one of the objectives should have mandatory courses that relate to it. It follows, then, that if cultural elements are a focus of an objective then courses in art, music, or drama should be taught not as free options but as compulsory electives. This same reasoning applies to the spiritual element as well as the practical arts. The program requires that core content be identified for a group of mandatory courses. The compuslory proportion of courses ranges from 100% in the elementary grades to 24% in grade twelve. As students gain competence in the basic skills needed for learning, their choice of what to learn becomes wider. It is assumed that by the end of grade nine the average student will have acquired adequate skills in reading, writing,numeracy and cultural and practical appreciations to begin making responsible decisions as to the type of high school program most appropriate for him or her.

The time allocations have been apportioned to achieve a balance amongst the objectives as well as attending to the importance of the content for each subject. The time allocations have been based partly on (a) past experiences and tradition (b) studies done on how much students can achieve in specified time blocks, and (c) on the assumption that a systematic approach and a structured course will increase learning efficiency.

A ten year longitudinal study on the teaching of elementary French in Britain identified the conditions necessary for successful learning of a language. These conditions probably apply to every subject area. A number of these conditions are noted as follows:

(1) Principals must have a positive attitude toward the subject.

(2) Teachers need a generalist training.

(3) Good learning materials must be available.

(4) Teachers must have reasonable competence in the subject and know appropriate methodology.

(5) Parental support must be positive.

(6) There must be a practical use for the knowledge obtained.

It would seem logical that if students and parents understand the purpose of the courses taught, with content that was carefully structured and taught by knowledgeable and competent teachers, the time requirements could in fact be reduced or the program enriched.

Chart 1, page 14 gives an overview of the total school program. This is expanded in more detail following the section on electives.

Total of 12,000 hours in 12 years of school.
Total of 1,000 hours per year.

CHART 1

BASIC LIFE SKILL COURSE REQUIREMENTS

OBJECTIVE	ELEMENTARY	TIME Hours/Yr		CHANGE in Hours	JUNIOR HIGH	TIME Hours/Yr		CHANGE in Hours	SENIOR HIGH	TIME Hours Per Year						CHANGE in Hours	AGGREGATE CHANGE Hours	TOTAL		% of Tot	
										Grade 10		Grade 11		Grade 12							
		Now	Rec			Now	Rec			Now	Rec	Now	Rec	Now	Rec			Now	Rec	Now	Rec
1. Develop competencies in reading, writing, speaking, listening and viewing.	Language Arts Reading Spelling Handwriting	420	375	-270	Language Arts	150	200	+150	English	125	125	125	125	125	125	0	-120	3345	3225	28	27
2. Develop basic knowledge and skills in mathematics, the sciences, and the practical and fine arts.	Mathematics	160	120	- 240	Mathematics	100	125	+ 75	Mathematics	125	125	---	---	---	---	0	-165	1385	1220	12	10
	Science & Environment	100	60	-240	Science	100	100	0	Science or Land & Life	75	75	---	75	---	---	+ 75	-175	975	810	8	6
	Art	50	50	0	Art)Fine Music)Arts Drama)	75	75	0	Fine Arts	---	100	---	100			+200	+200	825	1025	6	9
	Music	50	50																		
	Second Lang.	---	75	+450	Second Lang.	---	75	+225	Second Lang.	---	---	---	---	---	---		+675		675	-	6
	Practical Art	---	---		Business Ed)* Home Ec.)* Ind. Ed.)* Practical * Arts *	0-75	100	+150	Practical Arts	---	100	---	100	---	100	+300	+375	225	600	-	5
3. Develop the learning skills of finding, organizing, analyzing, and applying information in a critical and objective manner.					APPLICABLE TO ALL GRADES AND COURSES																
4. Develop knowledge, skills, attitudes and habits which contribute to physical, mental and spiritual health and safety.	Health	50	50	0	Health) Physical Ed)	75	50) 100)	+225	Health and Physical Ed.	50	100	---	100	---	---	+150	+495	1055	1550	9	13
	Physical Ed.	80	100	+120																	
	Safety Ed.	---	20	+20													+ 20		20		
					Religious Study	---	50	+ 50	Religious Study	---	---	---	75			+ 75	+125		125		1
5. Develop basic knowledge and skills in social studies and an understanding of the meaning, responsibilities, and benefits of active citizenship at the local, national, and international levels.	Social St.	90	100	+60	Social Stdy.	100	100	0	Social Stdy.	125	125	125	125	---	---	0	+ 60	1090	1150	9	10
									Modern Living	---	100	---	---	---	---	+100	+100		100		1
					Guidance	25		-25										25		.2	
6. Develop the knowledge, skills, attitudes, and habits required to respond to the opportunities and expectations of the world of work.					APPLICABLE TO BOTH ACADEMIC AND PRACTICAL ARTS COURSES																
JDH '77		1000	1000			700	975			500	850	250	700	125	250			8925	10500	72.2	88

6. THE ELECTIVE PROGRAM

6.1 The Need For Choice

The purpose of options or elective courses is to give students an opportunity to study or work in an area of their own choice. The assumption is that in this way students will broaden their understandings and increase their abilities in cultural, practical or academic activities of their interest. It is important that as students master the basic rudiments of communication, computational and social skills they have the chance to use this knowledge or skill in a practical way. In order to do this a variety of electives have been introduced over the years.

Some of the courses have been developed at the local level to meet specific needs, all with the objective of enriching the students' lives. The major point that can be made in respect to options is that they do provide a way to meet the variety of needs and interests of individual students.

6.11 Definitions

Election or option suggests that students have a choice in the learning experiences in which they wish to engage. For the purposes of this paper the terms will be defined as follows:

(1) Content Elective will refer to content within a course from which a selection can be made by the teacher, by the students or through mutual cooperation.

Curriculum committees generally lay out the scope and sequence of the content in such a way that a teacher can make some selection. There is a core portion that must be taught with additional materials left to the choice of the teacher and/or the students. The Social Studies curriculum allows up to one quarter of the content to be developed locally. Language Arts provides for considerable teacher selection. The same is true for most courses.

It is advocated that curricula continue to allow for teacher selection or development of content for the non-core portions. The ratio of core to elective content would be the recommendation of the Curriculum Policies Board.

(2) Compulsory Elective refers to a choice among designated courses. Eg., the choice between art, drama, or music.

While the term appears contradictory, the intent is that students be required to take courses from two predetermined groupings, namely, the fine and practical arts. This is in conformity with the objectives set out for the school.

The courses in this category would compare to the "A" options as now structured in the junior high school and the fine and practical arts at the high school. These courses would be structured by Alberta Education.

(3) Option refers to a free choice of any course for which the Department or the local school district has developed approved content.

The option courses would begin in grade ten and increase to more than 70% of the grade twelve program. An option course would be any course which is not compulsory. Mathematics 20 for example is an option.

The options would be selected from courses prepared by Alberta Education and a choice of up to 250 hours or 10 credits from locally developed courses.

(4) Locally Developed courses could be prepared and approved by the local school district.

When course content developed by Alberta Education does not meet the needs of a particular student group, a school board has the freedom to develop suitable courses. Such courses should be prepared in the standard format used by the Department and in consultation with the appropriate Associate Director in the Curriculum Branch. No further approval other than a School Board resolution would be needed to implement the course.

Two courses or 10% of a students diploma requirements could be selected from locally developed curricula. Two computer course numbers carrying a value of 3 or 5 credits would be assigned for this purpose.

Implementation of the courses would be the responsibility of the local board including any special equipment or facilties that might be needed.

Any financial requirements over and above the normal per-pupil grant would be carried by the local districts.

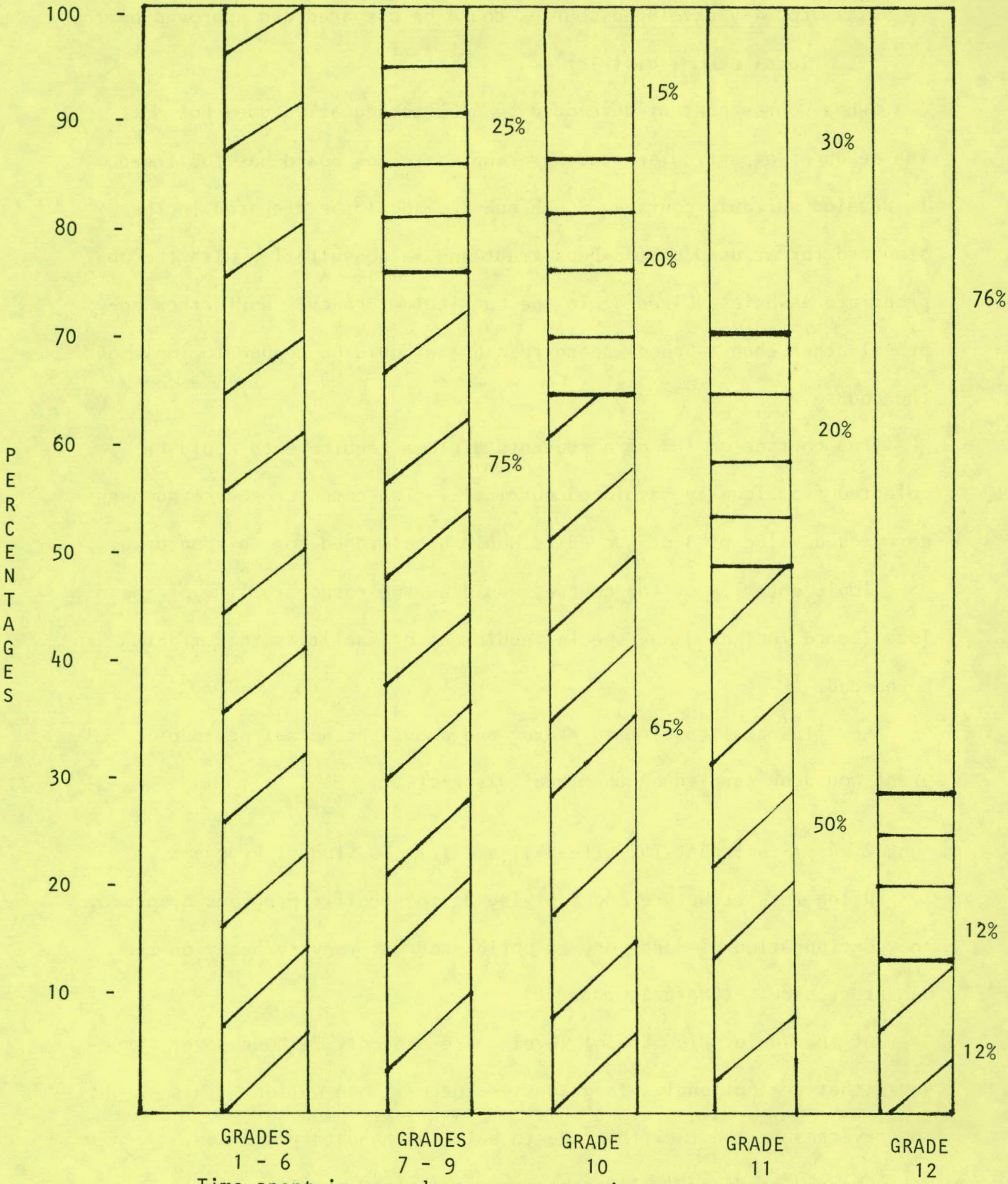
6.12 Application At The Life Skills Matrix To Student Programs

Using this structure and applying it to specific programs by grade, the configuration of mandatory to option courses is very heavy on the mandatory side. (Chart 2, page 18)

At the Junior High School level there are only 75 hours over three years that are optional. In grade ten there is one option. This weighting reverses by the twelfth grade to only two mandatory courses.

Chart 7 on page 24 illustrates a total high school program. The minimum number of credits add to 70. This includes the credits allowed

RELATIONSHIP OF CORE, COMPULSORY ELECTIVE AND OPTION COURSES IN PERCENTS



Time spent in compulsory versus option content.

▨ Compulsory Core (with content election)

▤ Compulsory Elective

☐ Options

CHART 2

for options. However, not all the time allowed for options would necessarily be used for that purpose. Students would only be required to take as many courses as required to meet the standards set by the diploma. The chart shows the combined mandatory credits for a high school program now and as recommended. The increase in mandated credits is from 35 to 70. This is not as radical as it first appears in that courses which were options in the current program are recommended as mandatory in the life skills program; for example, fine and practical arts.

CHART 3

JUNIOR HIGH ACADEMIC

LIFE SKILLS PROGRAM

CURRENT					RECOMMENDED				
Obj.	Description	Course	Time Hrs.	Total Time	Description	Course	Time Hrs.	Total Time	Change
1	Language Arts	3	150	450	Language Arts	3	200	600	150
	Mathematics	3	100	300	Mathematics	3	125	375	75
2	Science	3	100	300	Science	3	100	300	---
3	Health & Phys. Ed.	3	75	225	Health & Phys. Ed.	3	150	450	225
	Fine Arts				Fine Arts	3	75	225	
4	Languages				Languages	3	75	225	225
	Religious Studies				Religious Studies	1	50	50	50
5	Social Studies	3	100	300	Social Studies	3	100	300	---
6	Practical Arts				Practical Arts	3	100	300	150
	Guidance	1	25	25					
	"A" or "B" Options	4	225	675	Options		25	75	
			775	2275			1000	3000	
	Time to increase core or options		225	725					
			1000	3000					

CHART 4

GRADE TEN LIFE SKILLS

Courses	Hours Per Year	Credits *
English: one of 10 13	125 hrs.	5 credits
Mathematics: one of 10 13 15	125 hrs.	5 credits
Science: one of Science (11 Biology (10 Chemistry (10 Physics (10	75 hrs.	3 credits
Physical Education 10	100 hrs.	4 credits
Modern Living 10	100 hrs.	4 credits
Fine Arts: one of Art Music Drama	100 hrs.	4 credits
Social Studies 10	125 hrs.	5 credits
Practical Arts: one of Industrial Education Home Economics Business Education	100 hrs.	4 credits
Options	150 hrs.	6 credits
	1000 hrs.	40 credits

* Credits are listed as minimum. Many courses may be taught for 4 or 5 credits.

CHART 5

GRADE ELEVEN LIFE SKILLS

Courses		Hours Per Year	Credits
English: one of	20 23 21 A and B	125 hrs.	5 credits
Science: one of	Land & Life 10 Biology 20 Chemistry 20 Physics 30	75 hrs.	3 credits
Physical Education 20		100 hrs.	4 credits
Fine Art: one of	Art Drama Music	100 hrs.	4 credits
Social Studies: one of	Social Studies 20 Social Science 20	125 hrs.	4 credits
Practical Arts: one of	Industrial Education Home Economics Business Education Work Experience	100 hrs.	4 credits
Religious Study		75 hrs.	3 credits
Options		300 hrs.	12 credits
		1000 hrs.	40 credits

CHART 6

GRADE TWELVE LIFE SKILLS

Courses	Hours Per Year	Credits
English: one of 30 33	125 hrs.	5 credits
Practical Arts: one of Industrial Education Business Education	100 hrs.	4 credits
Options	775 hrs.	31 credits
	1000 hrs.	40 credits *

* While each year of high school is set out as 40 credits, students need to complete the core areas and enough of the options to make a grand total of 100 credits for a high school diploma.

CHART 7

COMBINED HIGH SCHOOL LIFE SKILLS PROGRAM

Current		Credit	Enrol.	Recommended		Credits
English	10	5	* 25878	English	10 or 13	5
	13		10153		20 or 23	5
	20	5	20134		30 or 33	5
	23		9217			
	30	5	20222			
	33		7946			
Mathematics	10	5	19277	Mathematics	10 or 13	5
	13		11073	Science	11 or	
Science	11		9141			
Science Biology	10	3,5	25279	2 of	Biology 10	5,6
Chemistry	10		23234		Chemistry 10	
Physics	10		13455		Physics 10	
					Land & Life 10	
Social Studies	10	5	34627	Social Studies	10	5
	20	5	22122	and/or Social Science	20	5-6
Physical Education	10	2	33014	Physical Education	10	4
					20	4
		35-37		Modern Living	10	4
				Fine Arts	10	4
					20	4
				one of Art Music Drama		
				Religious Studies	20	3
				Practical Arts		
				one each year) Ind. Ed.		4
				) Home Ec.		4
				) Bus. Ed.		4
				) Work Exp.		
						70-72

*All enrolment figures 1975-76.

6.2 Current Status of Elective Programs

Elective programs formally begin in junior high and continue through high school. Two groupings are used. The "A" options are courses selected from the cultural and practical arts. A minimum of one "A" option should be studied each year to a maximum of four.

The "B" options are courses that are intended to enhance the opportunities for the extension of core areas. The content for these is developed by teachers at the local level. Students need not take any "B" option or as many as three each year.

In summary, a student should take four option courses each year which should include one "A" option with the other three selected from "A" or "B" courses. Chart 8 identifies option titles currently used and lists the recommended options under the new proposal (page 28).

High school options total 276 courses and range over the broad spectrum of academic, cultural and practical arts areas.

In addition to the Department courses,a total of 56 locally developed courses have been approved for use in designated schools or school districts.

6.3 Proposed Compulsory Elective and Option Courses

It is recognized that some freedom of choice based on student interest is an important motivation for learning. It is further acknowledged that students should be introduced to new areas of knowledge and provided with enough time for them to recognize and begin to understand its structure.

Elementary

The first six years of schooling prepare the student with basic tool (academic) skills of reading, writing, and arithmetic so that these can be applied to a variety of practical and academic fields. This too is a period when social skills are developed and the base is laid for cultural tastes. Thus the electives become a practice ground for the application of the basic communication skills.

Junior High

In the Junior High School students select from a range of structured Compulsory Electives in such a manner that the objectives can be achieved. Consequently, they will select a fine arts course each year from art, drama or music. A second language will be compulsory. The language may be any one from an approved list. One course each year will be chosen from the practical arts areas of Home Economics, Industrial Education or Business Education. This is illustrated on Chart 8 page 28 .

Enough time (100 hours) will be spent in each of these courses so that students can learn to appreciate and develop some skills in the area.

Senior High

The senior high school option program provides a progressive increase in the choice of courses as the student advances through the grades.

The first year of high school is a year of orientation. The skills learned thus far become the basis for more rigorous development.

As the student advances through high school the compulsory program continues the expansion on the objectives by requiring at least two courses selected from the fine arts (art, music or drama) and one from religious studies.

The course on religious studies or ethics speaks to the spiritual needs of man. It is a dimension that has received little time in current school programming.

The practical arts require a minimum of three courses to help students come to a tentative resolution about a career choice.

The option courses provide a broad range of courses which can lead to preparation for a job, provide the prerequisites for entry to formal post high school education or continuing education later on.

In grade ten, one option course may be selected. In grade eleven from two to three options are available and in grade twelve, five to six option courses may be selected. In total a student may select a minimum of six to nine options to complete a high school diploma.

These options may be selected in the fields of Fine Arts, Practical Arts or the Academics. Courses may come from two sources; those developed by Alberta Education and those developed by school districts. The local option would be limited to a total of ten credits.

(see appendix "A" for current status of courses and enrolments)

CHART 8

JUNIOR HIGH ELECTIVES

CURRENT

Description	No. Courses	Enrolments 7	8	9
"A" Options:				
Agriculture	1	1965	830	762
Art	3	18414	16244	13883
Music (General)	3	2384	1553	1104
Music (Choral)	3	2570	2050	1760
Music (Instrumental)	3	8230	6184	4698
Drama	3	10331	10021	9027
Home Economics	3	9432	14904	13772
Industrial Education	3	9920	15484	14237
Typewriting	1	1815	3464	8503
French	3	15668	11345	8960
German	3	504	428	405
Latin	3	8	8	33
Ukrainian	3	727	569	356
	35			

Students may now take 12 options over 3 years. Of these a minimum of 3 could be "A" options and the rest can be "A" or "B" options.

"B" Options:

- Science
- Language Arts
- Social Studies
- Physical Education
- Second Languages

The number of courses in any one area is limited only by the interests, resources and persuasions of the system, school, teacher and student.

RECOMMENDED

Description	No. Courses
A. Cultural	
Art	3
Music	3
Drama	3
B. Practical	
Home Economics	3
Industrial Education	3
Business Education	3
C. Languages	
French	3
German	3
Ukrainian	3
Spanish	3
D. Religion	1
Ethics	1

Students must take one course from each of categories A and B in each grade for a total of 6. They must take 2 courses in category C during the junior high school years and one course in category D, The total number of option courses to be taken is 9.

7. MAINTAINING STANDARDS

The effectiveness of schooling depends on how successfully the objectives are being achieved in the eyes of the public. Success or failure is judged on how well the graduates of schools, institutes of technology or universities do in the world of direct employment. This suggests that there are standards of expectation out there and that these can be defined in terms acceptable to the majority. History suggests that this is only partially true.

Fortunately, however, experience also teaches that standards must and can be set, and that by careful sequencing most students can achieve them. There are many forms of evaluation of which the written tests are the most common.

There are two general categories of tests. These are the norm-referenced tests and the criterion-referenced tests. Norm-referenced tests determine how a student ranks on a scale with other students. Most of our provincial tests were of this type. The criterion-referenced test determines what a student knows about the prime elements of the subject. Criterion-referenced tests require:

(1) a clear definition of the objectives.

(2) test items that directly reflect the content to be learned.

(3) levels of achievement or standards that are common to all.

(4) remedial work to be undertaken if students fall short.

Criterion-based tests are instruments that help the teacher and the student determine how well they have achieved in various elements of a course. Criterion-based tests appear to offer the best device for measuring proficiency.

7.1 Competency Measures

It seems natural then that in order for a school to have proficient graduates it will have to administer a series of competency tests at various levels so that students have time to overcome deficiencies. The purpose of such tests is to identify weaknesses, not only on the part of the student, but in respect to content and teaching strategies as well, and to suggest changes so that students can reach the desired levels.

The criterion levels set are based on experience and their absoluteness is always related to a specific time and situation. As society changes and situations change so may the criterion levels.

Schools must make certain though ,that the proficiency tests they use measure the behaviors that students had an opportunity to learn. This requires that content validity of the tests be assured.

To recap then, competency measures must include agreement on:

(1) the kinds of indicators to be used to get evidence on accomplishment.

(2) how the achievement will be documented.

(3) the levels of outcome desired.

(4) procedures to be followed in judging performance.

(5) what remedial processes will be used if needed.

7.2 Documentation of Experience

While many skills can be measured by tests of competency, there are many complex behaviors especially in the realm of feeling and appreciation (affective) that cannot at this stage of the art be adequately evaluated by such tests. To fill this gap verification of experience through documentation is required. The objectives state that the persons leaving our schools will have opportunities to learn to work in groups; to discuss; to tolerate good-naturedly those who are unpleasant or offensive; to be agreeable and reasonable to their associates; to complete tasks and to work together on a team enterprise. All of these experiences contribute to the preparation of youth for adulthood.

It is through such activities that qualities such as maturity, dependability, and the ability to work constructively in group settings are fostered. Evaluating such experiences can be done through documentation, ie., describing the events and the individual student's successes or failures as actually seen.

Actual experience is central to education and is the truest measure of a student's personal growth and development. Because of this, the student's record should show this component along with the competency measures derived from the specific examination of skills.

8. GRADUATION REQUIREMENTS

The graduation diploma must reflect the objectives of education. It should state whether the desirable competencies and behavior patterns have been achieved. The major criterion that should be applied to the inclusion of competencies as graduation requirements is their usefulness in life. The diploma should certify that the graduate has acquired the basic skills and knowledge essential to effective adult citizenship.

To graduate from a high school in Alberta a student should be able to demonstrate:

(1) an ability to read, write and compute at a specified level of competency.

(2) an understanding of the basic scientific and technological processes

(3) a knowledge of personal health and the disciplines of family living

(4) an acquaintance with the arts, philospphy, and a second language

(5) a knowledge of: Canada's history and its economic and political structure; world relationships and environmental and consumer concerns

(6) a knowledge of personal career options and entry level skills for an immediate job or further education.

The verification of these requirements would follow two approaches:

(1) The use of competency measures.

Competency measures would be used in the areas of the language arts, mathematics, social studies (in part) and science (also in part).

The specific competencies to be measured would come from the course content as developed through the coordinating committees and approved by the Curriculum Policies Board. To provide for time to achieve the level of competency set, students should be tested at intervals prior to graduation. Suggested check points are at the end of grade two, five, eight and eleven.

The grade two and five check points allow time to overcome inadequacies while in elementary school. The same reasoning applies to the checks at grade eight and eleven. As further support for the grade eleven evaluation, the program as outlined indicates that by that time all the basic competencies required through mandatory courses should have been achieved. The grade twelve program provides further preparation for entry into a job or further education.

(2) The use of documentation.

Documentation refers to the description of experiences that have been successfully completed. For example ,the physical education program should not be evaluated through a paper and pencil test. Daily exercising, proper diet and sleep are basic to good health. The measure here is participation in the course and observations the teacher has recorded based on experiences with each student.

Documentation also consists of the number of courses a student completes and the extent of the participation. The record should show sufficient attendance in courses and programs to ensure that the student has received the educational and social benefits identified in the objectives.

The credit system operational in Alberta since 1936 is a good one and it should be continued. The number of credits required for graduation should be sufficient to achieve the objectives set out. While the sample programs used in this paper add up to more than 100 credits it is not uncommon for students to take the extra courses.

The 100 credit program seems to be reasonable and should continue to be the minimal graduation requirement. These credits should be awarded on the basis of the two approaches described. Those courses that fall into the competency area would be evaluated on the basis of competency and not on time spent. As an example if a grade ten student met the competency requirements of grade eleven mathematics he could be awarded the credits.

Courses in the area where experience needs to be documented as in fine arts, practical arts and physical education ,credits would be based on attendance as well as demonstration of the competencies inherent in the objectives.

Students leaving school before meeting the graduation criteria should be given a school leaving certificate. This certificate would state the competencies achieved in each course at the time of leaving.

The graduation diploma should indicate that the student has successfully measured up to the competency levels specified for each course and met the attendance requirements in the courses where this was mandatory.

9. RECOMMENDATIONS

This paper represents an effort to review current practices used to achieve the objectives of education and suggest modifications to both the objectives and the practices which could better achieve the desires of contemporary Albertans.

There are no brilliant insights or psyche shattering proposals. Nevertheless the modest recommendations could profoundly change our current system.

For your consideration it is recommended that:

(1) The objectives for Alberta education be revised to bring them in line with what the school can do.

(2) All courses and the attending content be sequenced so that a continuing progression of competencies and knowledge skills are cumulative. A systems approach to networking courses from one to twelve could provide the strategy to achieve this.

(3) Courses developing the broad objectives of Personal Development, Social Responsibility, and Practical Application be mandatory until a level of competency or experience is attained that meets the standards set by Alberta Education.

(4) Systematic monitoring be carried on in all school systems.

(5) Four check points be mandated for a general assessment of student progress and competency. These are to be at the end of grade 2,5,8, and 11.

(6) Students not measuring up to competency levels set be given special attention and advancement delayed until competencies are achieved.

(7) The option program become more restrictive in favor of compulsory electives.

(8) An individual student's high school option program allow for the inclusion of up to two, 3 to 5 credit courses developed locally. Such courses to require the local school boards approval only.

(9) Teacher education faculties be challenged to meet the same criteria for accountability at their level as the schools are.

(10) Following agreement on the design, the program be phased in over a period of ten years.

10. IMPLICATIONS

The implications of introducing the Basic Life Skills Program vary from little inconvenience to major revisions and costs. Each recommendation will be examined and the implications recorded.

Recommendation #1: Change the "Goals of Basic Education."

The acceptability for the suggested revision will determine the extent of the work involved. Accepting the objectives set out in this paper implies that a more accountable system will emerge and that the competencies of students leaving school will be congruent with the objectives. To achieve this the other recommendations will have to be acted upon.

Recommendation #2: Selection of courses and content be in harmony with the general objectives and competencies and knowledge skills be sequenced in each course area to be cumulative.

This is an ongoing activity of ad hoc committees now. It would mean a review of existing courses and content to make it conform with the objectives. Staged over a peiod of five years this would not be a serious problem. It would provide an opportunity to set up a complete networking of courses and content along with teaching strategies that could enhance the productivity of every teacher.

Recommendation #3: Courses be mandatory in the three major areas of:

(1) Personal Development

Most of the academic courses fall in this category and would be attended to under recommendation 2. Time is increased for English and Mathematics at the Junior High School. As all schools are programmed for these courses the additional time would not be added cost of instruction.

The additional 75 hours of science in high school would require additional laboratory space.

Health and Physical Education have considerable increased time, nearly twice as much as that previously required. This could result in a bind in some schools. However, the facilities of the community, Parks and Recreation, school grounds and even the classroom itself can serve various elements of the program.

There would be need for more physical education teachers or more emphasis on physical education for all teacher candidates in training.

The Fine Arts are recognized as basic to an individual's well being. These are well established in the schools and the mandatory stipulation is not likely to change current enrolments or the necessity for additional facilities.

The introduction of a second language in grades one to nine will increase the demand for teachers. Currently, about 52,000 out of 111,500 students in Junior High are taking a second language. The enrolment in elementary French is 58,122. With 200,000 students at the elementary level the demand for second language teachers could be very great. However, teacher competency in a language and teaching materials would be the only demand. Facilities are already there.

Religious education or elements of philosophy or ethics is necessary to attain the objectives. A number of courses are currently being taught, some of them being locally developed. This could be a controversial area if not carefully handled.

Modern Living needs to be reviewed with the objective of placing the emphasis on the family unit and its importance to the well-being of society. If our society believes in the family, it will have to teach students what the discipline of family living means. No special facilities are required but teachers may be difficult to get.

(2) Social Responsibility.

The Social Studies and Social Sciences would be the major carriers of this content. The current revision could go a long way in meeting the criticisms now directed at this program.

No change in the number of teachers required is anticipated.

(3) Practical Arts.

Mandating courses in career orientation and development will have a major impact on the practical arts. At the Junior High level the situation is as follows:

Currently there are - 3,556 students in Agriculture
38,108 in Home Economics
39,641 in Industrial Education
13,782 in Typewriting

There are a total of 95,088 taking courses in the Practical Arts. The total Junior High enrolment is 111,517. It would appear that with careful planning and scheduling the requirements at the Junior High level could be met with little additional expense.

The situation at the High School level is as follows:

Enrolments	Grade 10	Grade 11	Grade 12	Total
Home Economics				
Clothing & Textiles	4,136	1,629	652	6,417
Food Science	7,016	2,557	709	10,282
Business Education All courses	44,719	32,268	13,632	90,619
Industrial Education (5 credit module) All courses	25,801	20,901	7,333	54,035
				161,353

This means there are 161,353 modules of 5 credits each now taught at the high school. Many students enroll in two or three five-credit courses as in Vocational Education or Business Education so this number does not represent students. Nevertheless we have the plant to provide 161,000 five credit student places. The high school population is 95,638. The facilities in place would provide every student with 8 credits of time.

The recommendation is that every student should spend a minimum of 15 credits in the practical area. This means a doubling of our current facilities or implementing an intensive community-oriented, work-experience program.

In the year 1975-76 the province's vocational facilities were used to 82% of capacity. This was based on an average class of 15. If this were increased to 18 per class, the additional students that could be accommodated would be 32,271 or 1.6 credits, making a total of 11 credits per student. This leaves us with an increase of 1/3 over our present plant. Currently, we have approximately:

522	Vocational Shops
280	Senior High Industrial Education Labs
300	Senior High Home Economics Labs
1,200	Senior High Business Education Labs
Total 2,302	

The work experience program could absorb about one half of the extra demand, leaving a need for about 400 additional labs or shops. With the increase of facilities there would be a requirement for more teachers. The total teaching force would not have to be appreciably increased but the teacher mix would be different. The phasing in of the labs over 10 years would be at half the rate that they were being built in the sixties.

Recommendation #4 and #5: Systematic Monitoring.

Four major check points for monitoring were recommended. These were in grades 2, 5, 8, and 11. At the elementary level, tests would measure competencies in the areas of Reading, Writing and Computation.

At the Junior High level the same three areas would again be tested with the addition of Science and Social Studies. The Fine and Practical Arts would have a documented evaluation based on experiences the students had completed. The documentation might take the form of a student profile indicating his/her interests, strengths and weaknesses. Such a profile would serve as a major counselling tool for the selection of high school courses.

The last formal monitoring would be in grade eleven This would consist of a battery of tests designed to measure basic competency levels for all the originally set out objectives. The documentation started in grade eight would be expanded for the fine and practical arts areas.

A test development section is already in operation in the Department of Education. This could be the unit that would develop the provincial tests in harmony with approved curriculum changes.

Schools would need help in planning their programs. One or two regional office consultants would be designated to review school timetables and course schedules to make certain that each school carries through on the provincial regulations.

Recommendation #6: Students must pass competency levels.

The idea that students simply pass from level to level because of age will be replaced by requiring them to achieve certain standards before advancing. This may require the move to more individualized instruction as students vary in their rate of development.

Special classes will need to be set up for those that learn more slowly.

Recommendation #7: Restrict Option Program.

The broad range of courses we now have could well continue in existence. However, students would be required to take courses out of certain categories in order to obtain a comprehensive education.

The implications for guidance are important.

Recommendation #8: Locally developed courses.

The recommendation that locally developed courses not require the Minister's approval would make it much easier and quicker for a school to teach a current topic. This would eliminate the proofing and red tape such courses are now subjected to. By limiting the number of credits to a maximum of ten per student, it is felt that a student's education could be personalized without deviating from provincial standards.

Recommendation #9: Teacher education coordination.

Making schools accountable assumes that teachers can meet the challenge. The university Faculties of Education will have to revamp their programs to meet the requirements of the new demands on teachers.

APPENDIX A

Current Status And Enrolment For Option Courses

Charts 9 through 14 provide names, enrolments and industry requirements for most of the current option courses in high school.

CHART 9

High School Options

ACADEMIC

Department		Credit	Enrol	Local		Credit	Enrol
Science 11			9141				
Science							
Biology	10	3	25279				
	20	3	18384				
	30	5	14593				
Chemistry	10	3	23234				
	20	3	16594				
	30	5	4425				
	30 X	5	8431				
Physics	10	3	13455				
	20	3	9203				
	30	5	6257				
	30 X	5	458				
English							
Communications	21A	3	2975				
	21B	3	1330				
Literature	21A	3	2466				
	21B	3	1103				
Reading	10	3,5	2141				
Mathematics	10	5	19277				
	13	5	11073				
	15	5	8631				
	20	5	15154				
	23	5	8598				
	25	5	3519				
	30	5	15649				
	31	5	3457				
	33	5	5735				
Second Languages							
French	10	5	7302	French	24	5	11
	11	5	2668	Hungarian	15	5	14
	20	5	4801		25	5	
	21	5	1310		35	5	12
	30	5	4173	Italian	15	5	130
	31	5	778		25	5	89
German	10	5	1626		35	5	16
	20	5	871				
	30	5	585				
	31	5	9				

Continued

Chart 9

(Continued)

Department		Credit	Enrol.	Local		Credit	Enrol
Latin	10	5	98	Polish	15	5	10
	20	5	30		25	5	10
	30	5	12		35	5	8
Ukrainian	10	5	385	Russian	15	5	8
	20	5	214		25	5	5
	30	5	146		35	5	
	31	5	13	Cree	15	5	47
Social Studies	10	5	34627		25	5	12
	20	5	22122	Spanish	14	5	21
	30	5	15019	Introduction to Modern Languages	15		17
Social Sciences							
Geography	20	3,5	2999				
Psychology	20	3,4,5	8268				
Sociology	20	3,4,5	5916				
Personal Psychology	20	3					
General Psychology	20	3					
Religious Ethics	20	3					
Religious Meaning	20	3					
General Sociology	20	3					
Sociological Institutions	20	3					
Local and Canadian Geography	20	3					
Origin of Western Philosophy	20	3					
Contemporary Western Philosophy	20	3					
Social Science	10A	3	1161				
	10B	3	677				
(these were developed in 1977)	20A	3	1929				
	20B	3	1295				
	30A	3	652				
	30B	3	237				
Economics	30	5	2321				
Health & Personal Development	10	2,3,4,5	1031				
Physical Ed.	10	2,3,4,5	33014				
	20	2,3,4,5	13572				
	30	5	5479				

Chart 10

High School Options

FINE ARTS

Description	Credit	Enrol.	Local	Credit	Enrol.
Fine Arts					
Art 10	3,4,5	8375	Cultural Studies 15		88
20	3,4,5	2919	25		61
21	3,4,5	756	General Fine Arts (pilot) 15	5	114
30	5	1439			
31	5	296	Humanities 15	5	12
Drama 10	3,4,5	4226			
20	3,4,5	1625			
30	5	867			
Music Choral 10	3,4,5	1495			
Instrumental 11	3,4,5	2863			
General 12	3,4,5	439			
Choral 20	3,4,5	630			
Instrumental 21	3,4,5	1572			
Choral 30	5	265			
Instrumental 31	5	877			

Chart 11

High School Options

HOME ECONOMICS

Department Developed	Credit	Enrolment	Locally Developed	Credit	Enrol.
Clothing & Textiles 10	4,5	4136	Aspects of Living 15	5	50
20	4,5	1629			
30	5	652	Perspectives for Living 15	3,5	425
Food Science 10	4,5	7016			
20	4,5	2557			
30	5	709			
Modern Living 10	4,5	869			
20	4,5	486			
30	5	544			

Chart 12

High School Options

BUSINESS EDUCATION

Description	Time Credits	1975/76 Enrol.	Description	Credit	1975/76 Enrol.	INDUSTRY REQUIREMENTS		
						1975	1982	Change
DEPARTMENT DEVELOPED			LOCALLY DEVELOPED					
Accounting 10	3	13056	Advanced Business			20404	28153	7749
20	3	7418	Practice 35A	3	112			
30	3	2401	35B	3	2			
Business Foundations 15	3,5	4867	General Business 15	5	93			
30	5	960			pilot			
Business Machines 30	5	2082	Business Machines 22	3,5	708			
Clerical Practice 20 (Business Procedures)	5	2095						
Marketing 20	5	1706						
30	5	209						
Law 20	3,5	8153				12337	15665	3328
Office Procedures 30	5	1756						
Record Keeping 10	3,5	2422						
Shorthand 20	5	2099				30117	42297	12120
30	5	738						
31	5	649						
Typewriting 10	3,5	24374						
20	5	9606						
30	5	4555						
Data Processing 20	3,5	1191						
Computing Science 30	5	282						

Chart 13 High School Options

INDUSTRIAL EDUCATION

Department		Credit	1975-76 Enrol.	Locally Dev. Course		Credit	Enrol.	INDUSTRY REQUIREMENTS		
								1975	1982	Increase
Industrial Education	10A	4,5	6309							
	10B	4,5	1784							
	20A	4,5	2545							
	20B	4,5	876							
	30A	5	917							
	30B	5	221							
Production Science	30	4,5	93							
Aircraft Mainten.	22	5	28							
	22B	5	15							
	22C	5	14					777	1068	291
	32A	5	15							
	32B	5	14							
	32C	5,10	15							
Auto Body	12	5	330	Auto Body	35	15,20	27			
	22A	5	173							
	22B	5	138							
	22C	5	75							
	32A	5	51							
	32B	5	47							
	32C	5,10	45							
Auto	12	5	113							
Mechanics	12	4,5	3782							
Auto	22A	5	1130	Auto	15	5,10	208			
	22B	5	1020							
					25	10,15	66			
	22C	5	625							
					35	15,20	7	12057	16463	4406
	32A	5	547							
	32B	5	466							
	32C	5,10	360							

Chart 13 Continued

High School Options

INDUSTRIAL EDUCATION

Department		Credit	1975-76 Enrol.	Locally Dev. Course		Credit	Enrol.	INDUSTRY REQUIREMENTS		
								1975	1982	Increase
				Auto Part Merch.	15	5,10	34			
					25	15,20	7			
				Service Station Op. & Management	15	5,10	56			
					25	15,20	12	3908	5488	1580
Related Mechanics	22A	5	51							
	22B	5	38							
	22C	5	37					5330	7154	1824
	32A	5	18							
	32B	5	17							
	32C	5,10	18							
				Plastics	15	5,10	18			
					25	15	7			
					35	15,20	3			
Sheet Metal	12	5	165							
	22A	5	9							
	22B	5	18							
	22C	5	12					1659	2073	414
	32A	5	17							
	32B	5	13							
	32C	5,10	7							
				Carpentry	15	5,10	107			
					25	10,15	15			
Building Const.	12	4,5	1642	Building Const.	15	5,10	132			
	22A	5	520		25	10,15	24	8648	10765	2117
	22B	5	380							
	22C	5	266		35	15,20	12			

Chart 13 Continued High School Options

INDUSTRIAL EDUCATION

Department		Credit	1975-76 Enrol.	Locally Dev. Course		Credit	Enrol.	INDUSTRY REQUIREMENTS		
								1975	1982	Increase
Building Construct.	32A	5	218							
	32B	5	259							
	32C	5,10	157							
				Building Maint.	12	5,10	86			
					32	15,20	2			
				Painting & Decor.	15	5,10	31	3367	4334	967
					25	5,10	4			
Visual Commun.	12	4,5	1859							
Commercial Art	22A	5	220	Commercial Art	15	5,10	101			
	22B	5	166		25	10,15	13			
	22C	5	111		35	15,20	7	1563	2206	955
	32A	5	125							
	32B	5	97							
	32C	5,10	91							
Drafting	10	3,4,5	1102	Drafting	25	5,10	9	2548	3465	1423
	20	3,4,5	140		34	5	19			
	12	4,5	2306		35	15,20	9			
	22A	5	423							
	22B	5	812							
	22C	5	130							
	32A	5	172							
	32B	5	294							
	32C	5	104							
Graphic Arts	22A	5	141							
	22B	5	168							
	22C	5	73							

Chart 13 Continued High School Options

INDUSTRIAL EDUCATION

Department	Credit	1975/76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS		
						1975	1982	Increase
Graphic Arts 32A	5	53						
32B	5	62						
32C	5,10	17						
			Photography 15	5,10	109			
			25	5,10	15	2208	3140	918
Electricity-Electron			Electricity 15	5,10	56			
12	4,5	1957						
			25	10,15	22	8094	10266	2172
22A	5	468						
			35	15,20	21			
22B	5	154						
22C	5	103						
32A	5	105						
32B	5	76						
32C	5	62						
Electronics 22B	5	253				1962	2655	693
22C	5	152						
32A	5	145						
32B	5	111						
32C	5	64						
			Appliance Serv. 12	5,10	108			
Machine Shop 12	5	694						
22A	5	151						
22B	5	128				3157	4070	913
22C	5	70						
32A	5	59						
32B	5	56						
32C	5,10	48						

Chart 13 Continued High School Options

INDUSTRIAL EDUCATION

Department		Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS		
							1975	1982	Increase
Piping	12	5	184				4442	5590	1148
	22A	5	88						
	22B	5	70						
	22C	5	57						
	32A	5	56						
	32B	5	56						
	32C	5,10	53						
Welding	12	5	825	Welding 15	5,10	123	6138	8719	2581
	22A	5	338	25	10,15	19			
	22B	5	243	35	15,20	4			
	22C	5	138						
	32A	5	135						
	32B	5	129						
	32C	5,10	111						
Beauty Culture	12	5	1085				4584	5822	1238
	22A	5	617						
	22B	5	381						
	22C	5	337						
	32A	5	306						
	32B	5	255						
	32C	5,10	218						
	32D	5,10,15	211						
Fashion & Furn.	12	5	56						
	22A	5	23						
	22B	5	8						

Chart 13 Continued

High School Options

INDUSTRIAL EDUCATION

Department		Credit	1975-76 Enrol.	Locally Dev. Course		Credit	Enrol.	INDUSTRY REQUIREMENTS		
								1975	1982	Increase
				Sewing & Design	15	10	35	555	733	178
					25	15	25			
					35	15,20	14			
				Dry Cleaning	12	5,10	21	1435	1964	529
					22	15	8			
					32	15,20	7			
Health Services	12	5	170					20139	29866	9727
	22	5	94							
	32A	5	53							
	32B	5	50							
Food Preparation	12	5	510					12538	16728	3990
	22A	5	197							
	22B	5	167							
	22C	5	154							
	32A	5	138							
	32B	5	110							
	32C	5,10	73							
	32D	5	67							
Television Crafts	22A	5	38					699	1156	457
	22B	5	16							
	22C	5	16							
	32A	5	18							
	32B	5	10							
	32C	5,10	9							

Chart 13 Continued High School Options

INDUSTRIAL EDUCATION

Department		Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS		
							1975	1982	Increase
Performing Arts	12	5	183						
	22A	5	85						
	22B	5	28				269	389	120
	22C	5	24						
	32A	5	22						
	32B	5	14						
	32C	5,10	14						
Forestry	12	5	10				1351	1743	392
Horticulture	12	5	188						
	22A	5	45						
	22B	5	21						
	22C	5	6				4272	5810	1538
	32A	5	15						
	32B	5	14						
	32C	5,10	15						
Work Experience	25	5	4188						
	35	5	2671						

Chart 14

High School Options

OTHER

Departmental		Credit	1975-76 Enrol.	INDUSTRY REQUIREMENTS		
				1975	1982	Increase
Agriculture	10	4,5	547	48219	43726	4463
	20	8,9,10	40			
	30	5,10,15	6			
Land and Life	10	3,4,5				
	20	5	NEW			
	30	5,10				
Driver Education	10	2	5368			
Occupations	10	2,3	1217			
Special Projects	10	3,5	3648			
	20	3,5	2911			
	30	5	2130			
Geology	10	5	14			
	20	5	104			

BIBLIOGRAPHY

Berman, Louise M., *New Priorities in the Curriculum,* Charles E. Merril Publishing Co., Columbus, Ohio, 1968.

Busstall, C. et al., *Primary French in the Balance,* Windsor, England: National Foundation for Educational Research Publishing Company Limited, 1974.

"The Essential Skills Television Project," Agency for Instructional Television, Box A, Bloomington, Indiana 47401.

Flaure, Edgar, *Learning to Be,* UNESCO, Paris, Harrap London, 1972.

Hathaway, Warren E., *A Network-Based Approach To Curriculum Development,* Warren E. Hathaway, 16902 - 95 Avenue, Edmonton, Alberta, 1971.

Lazaruk, Walter, *Second Languages and Basic Life Skills,* unpublished paper, University of Alberta, 1977.

Lehmann, Henry, *"The Systems Approach to Education,"* Audiovisual Instruction, February 1968, pp. 144-148.

Marland, Sidney P., Jr., *"Educating for the Real World,"* Business Education Forum, November 1971, pp. 3-7.

The National Association of Secondary School Principals, *Competency Tests and Graduation Requirements,* NASSP, Reston, Virginia 1976.

Parnell, Dale, *"The Oregon Walkabout,"* Phi Delta Kappan, November 1974, pp. 205 - 206.

Proceedings of the Alberta Chamber of Commerce, Education and Business Conference, Jasper Park Lodge, Jasper, Alberta, October 21, 22,23, 1976.

Smith, Arthur De. W., et al., *Generic Skills In The Reasoning and Interpersonal Domains,* Training Research and Development Station, Department of Manpower and Immigration, Prince Albert, Saskatchewan, 1974.

Torgunrud, E. A., *"Whither Are We Tending,"* Banff, November 1974.

Tyler, Ralph W., *Where Learning Happens,* National Elementary Principal, Vol. 54, No. 3, Jan/Feb. 1975, pp. 38-42.

Kahlil Gibran, in The Prophet, writes about the place children should have:

> Your children are not your children.
> They are the sons and daughters of Life's longing for itself.
> They come through you but not from you,
> And though they are with you, yet they belong not to you.
> You may give them your love but not your thoughts.
> For they have their own thoughts.
> You may house their bodies but not their souls.
> For their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.
> You may strive to be like them, but seek not to make them like you.
> For life goes not backward nor tarries with yesterday.

A·T·A LIBRARY

Date Due

MAR 18 '80
DEC 2 1981
82 11 17
NOV 16 1988
1989 11 19

375.0097123 Alberta education and
A 333 diploma requirements
ara 1977
c. 2

THE ALBERTA TEACHERS' ASSOCIATION
11010 - 142 STREET
EDMONTON, – ALBERTA
T5N 2R1